

MINUTES
OF THE
SPECIAL SESSION
ENVIRONMENTAL PROTECTION COMMISSION
MEETING
APRIL 12, 2004

INGRAM OFFICE BUILDING
7900 HICKMAN ROAD
URBANDALE, IOWA

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MEETING MINUTES

CALL TO ORDER

The Special meeting of the Environmental Protection Commission was called to order by Chairperson Kathryn Murphy at 9:05 a.m. on Monday, April 12, 2004 in the Ingram Office Building, Urbandale, Iowa.

MEMBERS PRESENT

Teleconference:

Kathryn Murphy, Chair
Darrell Hanson, Vice Chair
Terrance Townsend
Jerry Peckumn
Heidi Vittetoe
Lisa Davis Cook, Secretary
Lori Glanzman
Francis Thicke

MEMBERS ABSENT

Donna Buell

PROCEDURE REVIEW

Mike Murphy said that this meeting is to discuss whether to change actions taken at the prior meeting with respect to the Chapter 61 Water Quality Standards Proposals. We are able to change what we did previously as long as we are within the 180 day period before final action must be taken. If you want to change something from the previous meeting, you should first move to rescind the vote on the two actions; to not adopt the recommendations and the motion to adopt the TDS standards. Even though that one failed we should take caution and vote to rescind it.

Darrell Hanson moved to rescind both actions that were taken at the March 15th, 2004 EPC meeting regarding Chapter 61. Seconded by Terry Townsend. Roll call vote went as follows: Lisa Davis Cook – nay; Lori Glanzman – aye; Darrell Hanson – aye; Francis Thicke – nay; Terry Townsend – aye; Heidi Vittetoe – aye; Jerry Peckumn – aye; Kathryn Murphy – aye. Motion carried.

APPROVED

FINAL RULE: CHAPTER 61, WATER QUALITY STANDARDS, CHAPTER 62, EFFLUENT AND PRETREATMENT STANDARDS: OTHER EFFLUENT LIMITATIONS OR PROHIBITIONS

Charles C. Corell, Chief of the Water Quality Bureau presented the following item.

The Commission will be asked to rescind its action at their March 15th meeting when it passed a motion that rejected the proposed water quality standards for TDS (total dissolved solids) and chloride. The rejected proposals are summarized below:

- **Site-specific TDS** (total dissolved solids) evaluation procedure. This procedure would require additional testing if the discharge would cause a TDS concentration in the stream greater than 1000 mg/l. The additional testing would include tests that determine whether the effluent is toxic to aquatic life. Tests to determine the concentration of the individual constituents of the dissolved solids are also required. Guideline values for individual constituents are included to guide the permit writer in setting appropriate limits. These guideline values are intended to protect livestock watering, wildlife, and some other uses. Applies to all water bodies.
- **Acute chloride** criterion set at 860 mg/l. This prevents chloride concentrations in the stream from becoming toxic to aquatic life. Applies only to Class B water bodies.
- **Chronic chloride** criterion set at 372 mg/l. This prevents chloride concentrations in the stream from becoming toxic to aquatic life in the long term. Applies only to Class B water bodies.
- **Chloride** criterion set at 1500 mg/l. This prevents chloride concentrations in the stream from harming livestock or wildlife that may use the stream for drinking water. This criterion is not intended to protect other uses of the stream. Applies to all water bodies including general use segments.

The department believes these rule changes are reasonable and protective of water quality and the uses being made of Iowa waters based on the many factors involved and the limited amount of directly applicable scientific data.

The department recommends the commission adopt only the site-specific TDS evaluation procedure. There was general agreement from the Technical Advisory Committee on this approach. This would replace the troublesome current TDS standard with a more practical approach. The department does not have detailed analysis on the economic impact of this change but most of the economic arguments were focused on chloride. The department can gather more information about the economic impacts of the chloride standards.

The department also recommends adding a sunset clause to the final rule as follows:

Amend subrule **61.3(2)**, paragraph “g,” as follows:

~~g. Total dissolved solids shall not exceed 750 mg/l in any lake, or impoundment, or in any stream with a flow rate equal to or greater than three times the flow rate of upstream point source discharges. Acceptable levels of total dissolved solids(TDS) and constituent cations and anions will be established on a site-specific basis. The implementation approach for establishing the site-specific levels may be found in the “Supporting Document for Iowa Water Quality Management Plans,” Chapter IV, July 1976, as revised on [the effective date of this amendment]. However, TDS shall not exceed 1000 mg/l in any lake, impoundment, or stream after [Three (3) years after the effective date of this amendment].~~

The sunset clause would allow the DNR and NPDES permit holders to use the site specific approach to collect information for a limited time before a better solution could be developed. Information needed for developing a better long term approach includes discharge concentrations of TDS, the specific components of that TDS, and the economic impact of TDS standards on municipal and industrial wastewater treatment facilities.

Kathryn Murphy asked why they changed the standard to 1000 mg/l rather than having it sunset back to the original standard.

Chuck Corell said that the way we have to amend language, we actually have to strike the 750 mg/l and I wasn't sure how to write a sunset clause that basically said to go back to what it said before. We had some affirmative and positive language in there that made it clear to everyone what the standard would be after the sunset date. We are assuming that the 1000 mg/l standard would not be attractive to wastewater facilities and that would be their incentive to work with us on gathering more data and to come up with a better solution.

Kathryn Murphy said that it's not logical to her that it sunsets back to something new and different.

Chuck Corell said that we figured it would take probably a year of gathering data to come up with a meaningful set of data and probably if past indications are any good indication of the future, probably close to a year to go through the formal rule making process and that leaves a year cushion of when things go wrong. The idea would be that the Department would be working hard with the environmental community and the wastewater facilities in those three years to come up with something different. We don't like the sunset clause as much as anyone else does.

Wayne Gieselman said that the Department expects a final rule at the end of three years. Not just a rule out for debate and discussion but something that has been agreed and finalized by the Commission.

Darrell Hanson said that he voted to not implement the rule last time because I wanted the pressure to be there to keep working for a comprehensive policy. I'm not willing to go back and adopt one step of something where I feel there needs to be more steps.

Terry Townsend said that he has concerns about the large number of dischargers that are going to have issues with this. If the DNR will determine exactly what the issues are and then come up with a recommendation in three years rather than grabbing a number out of the air.

Lisa Davis Cook asked about the site specific standard and how they determine a standard.

Chuck Corell said that we would like at each facility and each discharge and decide what the limit would be. We would not give them a limit (based on the evaluation of the wet test) above basically the concentration that they tested for toxicity.

PUBLIC PARTICIPATION

ROBERT BAUMANN said that he is appalled at the DNR's proposal. It is not a sunset action. Sunsets wipe clean the slate and start over. This really is a back door implementation of a 1,000 mg/l on discharges to all Iowa streams. Earlier we indicated that there were a 157 cities in the state of Iowa whose TDS in the drinking water already exceeds the 1000 mg/l TDS limit. All

Iowa Cities have TDS in their drinking water. If they soften their water with lime soda softening and that's normally restricted to economically to cities in the 6,000 population and up, they probably have the lowest TDS in their drinking water somewhere in the neighborhood of 200-300 mg/l. Most cities have between 400-1,000 mg/l TDS in their drinking water. Effectively you are saying to the citizens of Iowa that you can't use ion exchange softening to soften your drinking water supply. We don't have very many industries that use soda chloride in processing. There are no evidences of problems from TDS, it's what constitutes the TDS that we ought to be looking for. We have a brand new electric power plant that is due to start operation. There is about \$70-\$80 million dollars invested in it. The cooling water from that plant uses wastewater from the city of Clear Lake and that exceeds the TDS limit of 1,000. So what you're saying is that we might shut that plant down in three years.

SUSAN HEATHCOTE, representing the Iowa Environmental Council addressed the recommendation to look at a 3 year temporary site specific approach. I think it's better than just going with a site specific approach without any deadline of where we will have to deal with this issue again. I think that we should consider requiring chronic wet testing for any perennial stream regardless of its designation. I was disappointed that we did not establish a chloride standard. That was apart of this rule making package. The recommendation that the department had for acute and chronic chloride for designated streams would have been helpful to have had in place as we were looking at this site specific approach. Again, chloride is one constituent that we know has aquatic life concerns. I would like to ask the Commission to reconsider the chloride standards for designated waters as well as the site specific approach for TDS, because it does provide that protection for chloride in our designated streams. Finally, I am concerned that we do not have a cap on the TDS. We have a number of uses that general waters have to support as a part of our water quality standards. The Dairy Extension recommendation was that a 1,000 or less is acceptable for dairy cattle, greater than 3,000 represents possible cattle problems. I do think it would be appropriate to consider a cap with the site specific approach.

GREG SINDT, Bolton and Menk submitted the following comments:

I have review the DNR staff brief to the EPC for the April 12 meeting that was posted on the DNR website April 9th. The meeting notice was also posted for the first time on the 9th and the meeting will be held Monday the 12th. This gives everyone very little time to develop public comments on this most important issue and proposed rule revision.

Note that the DNR staff is recommending a very significant revision to the draft rule that was put on public notice. The DNR staff indicated in the brief that it has added a "sunset clause". That clause states:

"However, TDS shall not exceed 1000 mg/L in any lake, impoundment, or stream after [Three (3) years after the effective date of this amendment]."

This addition to the DNR staff recommendations for Option B action at the March meeting has very significant impacts as several (perhaps as many as 200 to 300) dischargers will not meet the 1,000 mg/L TDS water quality standard that will become effective in three years, if the DNR proposed rules are adopted Monday.

It seems to me that this is not a “sunset clause” as billed by DNR staff. It is my opinion that a true sunset clause would phase out the new rule at the “sunset” and the rules would revert to the rules that were in effect prior to enactment of the new rule. In this case, the rule should revert to the current subrule 61.3(2), paragraph g:

“g. Total dissolved solids shall not exceed 750 mg/L in any lake, or impoundment, or in any stream with a flow rate equal to or greater than three times the flow rate of upstream point source discharges.”

As Dr. Baumann presented to the EPC in March, the 1,000 mg/L TDS standard applied to all streams is a much more stringent standard than any interpretation of the current nebulous standard that is based on 750 mg/L TDS applied to streams above some form of a defined low flow. Dr. Baumann made that March presentation in response to the motion made by Commissioner Hanson at a prior EPC meeting for establishing a 1,000 mg/L TDS water quality standard applied to all streams. Commissioner Hanson stated several times at the March meeting that he was no longer considering the 1,000 mg/L TDS standard, yet here we see it once again in the proposed rule.

I support the DNR proposal to replace the current 750 mg/L TDS standard with the site specific TDS evaluation procedure, if the support document is modified as we requested in March (to clarify that the support document is a guideline as intended by DNR and not a set of numerical standards). I do not agree with the DNR proposed “sunset clause” because it will result in the establishment of a TDS standards in three years that has no technical basis, is not supported by many members of the Technical Advisory Committee, and will have significant economic impacts that are even greater than the previously proposed and rejected chloride water quality standards.

JAY EATON, Citizen of Iowa said that first of all we start out with a proposition that there is no environmental problem to be cured. The Commissioners (some of those who have spoken today) said that they do not know the right answer. The DNR doesn’t know the right answer yet. There was a proposal this morning for a 1000 TDS. That is arbitrary and irrational. It is not supported technically. I believe that it is not good policy for the EPC to use as a basis for moving forward on this. What is broken is the 750 mg/l existing standard. It was broken since it was adopted. That has been acknowledge by the DNR. A site specific proposal has been made to solve that problem. In conclusion, we need to gather more facts and information and than come back with a standard.

LARRY HILL, Farmland Foods said that he is opposed to the sunset clause. What happens at the end of three years? The issue will be raised up again with maybe a new Commission. The standard does not have a technical basis. If we do establish this site specific, I think we need to wait until we receive more information from other states and then decide on what’s the best. We do have protection for the streams with option B. I think that is the way we should go.

-- End of Public Participation --

Darrell Hanson said that whether or not there are problems with TDS or chloride, we don’t really have reports of problems but we’re not set up to gather information of problems. I think

there is reason to believe that an acute standards would be somewhat lower than a chronic standard for designated waters, this doesn't mean there are no problems we just don't have a system to report the problems. The 1,000 standard was not my choice, I just suggested to the Department that they do something other than saying we're going to take the pressure off now and then we'll try to keep working on it, but to have some default setting that would bring everybody back to the table. I was not willing to simply take the lid off of the standard without having some assurance that we are going to deal with the acute chronic standard issues.

Jerry Peckumn said that he understands the objections to the 1,000 TDS because if we would revert to that it would cause problems that would make it difficult to plan. It seems to me that the 372 chloride level that is recommended probably is more supported by science.

Kathryn Murphy said that her concern as a policy maker is that we throw numbers in for a default but what we're trying to do is to gather more data and sampling. Is there any way that we can utilize language without putting a specific number in there.

Francis Thicke said that he is not comfortable with the site specific testing if there is not numeric standard with the wet test.

Motion was made by Heidi Vittetoe to adopt only the site specific TDS standards while directing the DNR to do the six recommendations listed below, then use the information gained to come back to the Commission with a correct standard by April 1, 2007. Seconded by Terry Townsend.

1. Sample and monitor chlorides and TDS for adequate data to make an informed decision including the possible costs and returns associated with clean and healthy water.
2. Monitor aquatic ecosystem impacts through biological surveys. Particularly where aquatic life may be impacted as a result of current effluent levels of cations and anions. Coordinate with and utilize fisheries personnel where possible.
3. Utilize the EPA to make sure options being considered are consistent with the Federal Clean Water Act including court directives.
4. Review stream classification to be sure that the uses of streams are properly classified. List perennial streams classified as general use.
5. Sponsor a workshop with help from EPA and Iowa scientists on alternative solutions to hard water, solutions for managing effluent during low flow conditions, new technology in waste treatment, and health considerations of effluent when reentering the drinking water supply.
6. Continue consideration of site specific WET tests but with maximum standards to protect aquatic ecosystems, livestock and wildlife watering and other uses in current rules.

Lisa Davis Cook asked the Department to explain how a permit is done using a site specific rule.

Ralph Turkle explained that basis we would look at in establishing water quality limitations for permit staff would be to gather the information they submitted to us based on the wet test. The basic requirement is that if you to a general use stream that obviously you would want to protect those for acute exposures. An acute test will be performed on the fathead minnow and

saradaphenia. That information would be submitted with the water chemistry that identifies the various key components that are present in the sample. We will look at the components to determine appropriate TDS levels and if necessary other ions and cations. The site specific concept particularly the use of the aquatic wet test is to show or demonstrate that that discharge is not having an acute effect on that receiving streams aquatic community. This site specific approach looks at both aquatic life and non-aquatic life.

Roll call vote went as follows: Lori Glanzman – aye; Darrell Hanson – nay; Francis Thicke – nay; Terry Townsend – aye; Heidi Vittetoe – aye; Jerry Peckumn – aye; Lisa Davis Cook – nay; Kathryn Murphy – aye. Motion carried.

NEXT MEETING DATES

April 19, 2004

May 17, 2004

June 21, 2004

ADJOURNMENT

With no further business to come before the Environmental Protection Commission, Chairperson Kathryn Murphy adjourned the meeting at 10:45 a.m., Monday, April 12, 2004.

Jeffrey R. Vonk, Director

Kathryn Murphy, Chair

Lisa Davis Cook, Secretary

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Water Quality Standards

Chapter 62

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